

STATUS OF CLAIMS

The following claim listing shall replace and supercede all previous claims.

1. (Currently amended) An isolation platform for a ~~structure~~ payload to be supported comprising:

an upper plate upon which the ~~structure~~ payload to be supported is placed, said upper plate having a plurality of downward-facing, conical, rigid bearing surfaces linked by connecting members;

a lower plate secured to a foundation, said foundation supporting the isolation platform and the ~~structure~~ payload to be supported, said lower plate having a plurality of upward-facing, conical, rigid bearing surfaces linked by connecting members and disposed opposite said downward-facing, conical, rigid bearing surfaces, said downward and upward bearing surfaces defining a plurality of bearing cavities between said upper and lower plates;

a plurality of rigid spherical balls interposed between said downward and upward bearing surfaces;

said downward and upward bearing surfaces comprising central apices having the same curvature as that of said spherical balls ~~such that a restoring force is substantially constant~~, and having recess perimeters having the same curvature as that of said spherical balls, which connects said central apices and recess perimeters with continuous slope, wherein the curvature of said spherical balls and downward and upward bearing surfaces are further configured such that as said

spherical balls and upper and lower plates displace laterally relative to one another, a restoring force is substantially constant, ~~vertical displacement of said upper and lower plates is near zero;~~

and a retention mechanism secures ~~for securing~~ said lower plate and said upper plate together, ~~and,~~

allows for lateral displacement between said upper and lower plates without separation of said upper and lower plates.

2. (Original) The isolation platform of claim 1, further comprising a resiliently deformable gasket interposed between said upper and lower plates.

3. (Original) The isolation platform of claim 1, wherein said upper plate comprises a plurality of upper plate segments attached to a plurality of corresponding upper connecting members which define said upper plate and further define a plurality of upper interstitial regions.

4. (Original) The isolation platform of claim 1, wherein said lower plate comprises a plurality of lower plate segments attached to a plurality of corresponding lower connecting members which define said lower plate and further define a plurality of lower interstitial regions.

5. (Currently amended) The isolation platform of claim 3, wherein said upper interstitial regions are filled with a solid filler material.

6. (Currently amended) The isolation platform of claim 4,

wherein said lower interstitial regions are filled with a solid filler material.

7. (Currently amended) An isolation platform for supporting a payload, comprising: a first ~~open-pan~~ structure having four or more plates having downward facing bearing surfaces, ~~wherein said first open-pan structure has a plurality of rigid members connected to said plates forming a quadrilateral, said first open-pan structure having openings between each plate,~~ each bearing surface comprising a ~~recess~~ steel recessed surface optionally coated with a protective layer with a central apex and a conical surface extending from said central apex continuously to a perimeter of said recess, wherein distances between said apices of said recesses are at least equal to distances antipodal points of a footprint of the payload; a second ~~open-pan~~ structure, wherein said first and second ~~open-pan~~ structures are positioned such that said bearing surfaces of said first and second ~~open-pan~~ structures define said four or more cavities therebetween, each cavity containing at least one rigid ball each, and wherein said first and second ~~open-pan~~ structures are movably fastened together in a manner that simultaneously limits displacement of said first ~~open-pan~~ structure relative to said second ~~open-pan~~ structure in a vertical plane and reduces displacement in a horizontal plane of said first ~~open-pan~~ structure relative to said second ~~open-pan~~ structure.

8. (Currently amended) The isolation platform of claim 7, wherein said first ~~open-pan~~ structure further comprises a payload securing device on a top surface of said first ~~open-pan~~ structure.

9. (Currently amended) The isolation platform of claim 7, wherein said first and second ~~open-pan~~ structures are open on one longitudinal end allowing access to cables.

10. (New) An isolation platform for supporting a payload, comprising: a first open pan structure having four or more plates having downward facing bearing surfaces, wherein said first open pan structure forms a quadrilateral, said first open pan structure having openings between each plate, each bearing surface comprising a steel recessed surface optionally coated with a protective layer with a central apex and a conical surface extending from said central apex continuously to a perimeter of said recess, wherein distances between said apices of said recesses are at least equal to distances antipodal points of a footprint of the payload; a second open pan structure having the same number of upward facing bearing surfaces as said four or more plates having downward bearing surfaces and wherein said first and second open pan structures are positioned such that said bearing surfaces of said first and second open pan structures define four or more cavities therebetween, each cavity containing at least one rigid ball, and wherein said first and second open pan structures are movably fastened together in a manner that simultaneously limits displacement of said first open pan structure relative to said second open pan structure in a vertical plane and reduces displacement in a horizontal plane of said first open pan structure relative to said second open pan structure.

11. (New) The isolation platform of claim 10, wherein the number of said plates and cavities is greater than 4.